

## **PUMPLESS EXTRACORPOREAL LUNG ASSIST USING ARTERIO-VEINOUS SHUNT IN SEVERE ARDS. EXPERIENCE WITH 30 CASES**

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### **Objective**

Show safety and feasibility of iLA as an rescue device for patients with a extremely low probability of survival.

### **Study Design**

Retrospective analysis.

### **Study Population**

30 patients with severe acute lung injury.

### **Methods**

Interventional Lung Assist was established with the Novalung® device for 6.5 days on average. Carbon dioxide removal as well oxygenation was required. Large arterial cannula were used in this study (comment: these authors have now moved to smaller cannula) resulting in a larger shunt blood flow than required for CO<sub>2</sub> removal. This allowed a certain amount of oxygenation.

### **Results**

The authors conclude that interventional Lung Assist is a simple treatment modality with low personal requirements and simple handling. The required arterial cannulation is associated with specific complications known from other treatments requiring arterial access.

The authors consider the opportunity to abolish full heparinization as a major advantage of iLA. The authors discuss the use of iLA in severe head and chest injury and for MEDEVAC. They conclude that iLA may be appropriate for patients with severe hypercarbia. iLA should be used not only as a rescue modality but rather as an extrapulmonary ventilator very early after injury.

### **Commentary**

These authors are pioneers of the procedure and have submitted in the meantime a manuscript reporting on rescue use of iLA in 90 patients.

